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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,487	09/24/2001	Hiroyuki Shimizu	214056US0 CONT	6804

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EXAMINER	
JACKSON, MONIQUE R	
ART UNIT	PAPER NUMBER
1773	6

DATE MAILED: 07/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,487

Applicant(s)

SHIMIZU ET AL

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,9,10,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,9,10,12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/190,264.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed 5/13/02 has been entered. Claims 5-8 have been canceled. Claims 1, 3-4, 10 and 12 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In view of the amendments and arguments filed 5/13/02, the rejections recited in paragraphs 3, 5, 6 and 9, of the prior office action have been withdrawn.

Claim Rejections - 35 USC § 103

4. Claims 1, 3-4, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-122974A (JP'974) in view of Katono et al for the reasons recited in paragraph 7 of the prior office action and restated below.

JP'974 teaches a welding wire coated on the surface with 0.01-0.6g MoS₂ and/or WS₂, 0.01-0.15g of one or more metal soaps, and 0.01-0.15 g lanolin oil, per 10kg of wire but do not specifically teach that the metal soap is a metal soap of an acid as instantly claimed (Abstract). However, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize any known species of metal soap commonly utilized in the art, wherein Katono et al specifically teach the use of sodium or potassium metal soaps of carboxylic acids comprising 8 to 22 carbon atoms. Therefore, it would have been obvious to one having ordinary skill in the art to utilize a sodium or potassium metal salt of carboxylic acids of 8 to 22 carbon atoms as taught by Katono et al for the invention taught by JP'974. Further, it would have been obvious to one having ordinary skill in the art to determine the optimum amount of lubricating

composition to provide per 10kg of wire given that the amount of lubricating composition is a result-effective variable affecting the lubricity of the metal wire.

Response to Arguments

5. Applicant's arguments filed 5/13/02 have been fully considered but they are not persuasive. Applicants respectfully traversed the obviousness rejection over JP'974 in view of Katono by alleging unexpected results with regards to significant improvements in welding wire feedability achieved according to the instantly claimed invention. The Applicants refer to Tables 9-1 to 9-6 in the specification that compare inventive examples with 5 to 12 carbon atoms and comparative examples with stearic acid (18 carbon atoms) or with acetic acid (2 carbon atoms). However, upon review of Tables 9-1 to 9-6 in view of Tables 8-1 to 8-7, which provide the specifics for each example presented in Tables 9-1 to 9-6, it is noted that there are several parameters that change between the examples, including wire/flux rate, fatty acid or salt thereof, feed oil, lubricating particles, amount of deposited fatty acid or salt thereof, and total of deposits, and hence, the Examiner takes the position that the data is inconclusive because it does not provide a clear comparison between inventive examples as instantly claimed with 5 to 12 carbon atoms to examples outside this range wherein the other parameters remain constant, particularly given that the data in Tables 9-1 to 9-3 appears to suggest that a change in one of the other parameters affects the feedability and clogging of the resulting welding wire. In fact, there appears to be no two examples wherein the only change is the type of fatty acid or salt thereof. Further, the data presented does not appear to provide any showing of unexpected results with regards to the claimed invention wherein the compound has a saturated or unsaturated, linear or branched, structure from 5 to 12 carbon atoms, particularly given that inventive examples 31-51

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include compounds outside the claimed invention, namely cyclic structures. Additionally, the comparative examples only utilize potassium acetate (2 carbon atoms) or potassium, sodium or calcium stearate (18 carbon atoms), and therefore, it is unclear to the Examiner how these very limited examples at 2 carbon atoms and 18 carbon atoms provide a showing of unexpected results for a compound selected from the group consisting of carboxylic acids and metal carboxylates; consisting of atoms selected from the group consisting of hydrogen, carbon, oxygen, nitrogen, sulfur, phosphorus and metal atoms; having a saturated or unsaturated, linear or branched structure with from 5 to 12 carbon atoms, as in instant claim 1. The data does not provide a showing that compounds with 3 or 4 or 13 or 14 or 15 carbon atoms would not produce similar results to those compounds instantly claimed, hence the Examiner questions whether the endpoints 5 and 12 are critical. Therefore, the Examiner maintains her position with regards to the obviousness rejection over JP'974 in view of Katono, but would reconsider her position upon a clear and conclusive showing of unexpected results with regards to the instantly claimed compounds.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428.

The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



mrj
July 17, 2002



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700